

CUSTOM RATES

for Idaho Agricultural Operations 2005-2006

by Paul E. Patterson and Robert L. Smathers



The Authors

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CUSTOM RATES 05-06 for Idaho Agricultural Operations

This guide serves three purposes. First, it outlines the procedures for establishing a custom rate charge based on the cost of owning and operating farm machinery. Second, it outlines procedures for adjusting historical market-based custom rates using indexes available from USDA. And third, it summarizes survey data collected by the University of Idaho from four regions of Idaho.

Custom rate information was collected by telephone and mail surveys between November 2005 and April 2006. Some custom operators provided the rates they charged in 2005 because they had not yet set rates for 2006, while others provided rates they expected to charge for 2006. In all cases, rates for 2006 were higher than 2005 rates.

The equipment needed to operate a modern farming operation is expensive and often quite specialized. On smaller farms, the operator may find it impractical to own all of the necessary equipment. Large diversified farms also may not find it feasible to own all needed equipment. Even farms with a complete machinery complement may need help to avoid missing planting or harvesting windows when weather delays occur. Some farmers solve these problems by trading work with their neighbors, while others hire a custom operator to perform certain farm operations. A custom operator typically specializes in certain farm operations, whereas a neighbor simply may have the equipment and time to trade work or to provide services for a fee.

Owning vs. Custom Hire

How much should be charged for custom farm work? Full-time commercial custom operators must charge a fee that covers all costs plus a profit. Those performing custom services for a neighbor may charge only enough to cover labor and fuel costs. In areas where a considerable portion of farm work is done by custom operators, established customary rates often cover actual machine

operating and ownership costs. Problems can arise, however, where no customary rates have been established or when a rapid increase in costs puts established rates significantly below total costs.

Custom services can sometimes be hired at a cost lower than that of owning and operating farm equipment, particularly on smaller farms. For example, a grain combine may have an annual ownership cost of \$18,000 or more. If operating costs for this combine are \$8 per acre and a custom operator charges \$28 per acre, then a minimum of 900 acres of grain must be harvested before ownership becomes as economical as custom hiring. The breakeven acreage calculation is calculated as follows:

$$\text{Breakeven acreage} = \frac{\text{Annual ownership cost}}{(\text{Custom rate per acre} - \text{Operating cost per acre})}$$

Annual ownership cost	=	Annual depreciation, interest, taxes, insurance, and housing (see table 1)
Custom rate per acre	=	Going rate charged for that service
Operating cost per acre	=	Fuel, maintenance and repairs, labor, and supplies

Figure 1. Breakeven acreage calculation

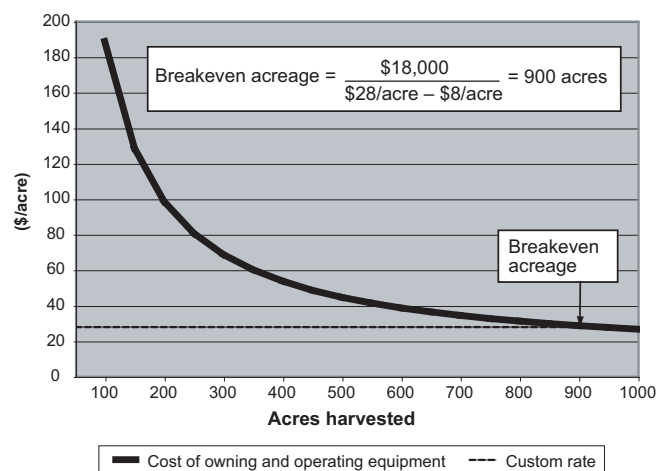


Figure 1 is based on this breakeven calculation. It shows that the cost of owning and operating the grain combine is greater than the cost of custom hiring up to the breakeven acreage (900 acres). If the owner of the equipment uses it on more acres than the number needed to break even, the average cost per acre will be less than the amount required to hire a custom operator. These breakeven cost calculations should be based on all costs—cash and non-cash. Non-cash costs include owner-operator's labor, depreciation for all equipment used, and interest on the owner's equity. Cash costs are the more obvious ones, such as fuel, maintenance and repairs, hired labor, taxes, and interest paid on equipment loans.

Equipment costs will vary by farm and custom operator. Factors that influence equipment costs include operating conditions, the amount and type of equipment use, the original cost of machinery, replacement costs, interest rates, and the quality of maintenance, among others. The method for estimating machinery costs (discussed later in this publication) is the same for both new and used machinery. The parameters will be different, however, and the resulting cost per hour of operation may differ significantly.

Other considerations in the decision to hire or own include the availability of custom operators and their timeliness in getting the work completed. Crop yield and quality may suffer if the custom operator cannot complete tillage, spraying, planting, or harvesting operations in a timely manner. The quality of the custom work should also be considered. Each individual needs to determine the risk associated with timeliness and quality of work. This will vary by crop, location, financial condition of the farmer, and competition in the custom services market.

Idaho Geography

The geography of Idaho displays wide differences in topography, climate, soils, and other variables affecting agricultural production. Consequently, a diverse agriculture with a wide variety of crop/livestock enterprises and management systems exists. Because of this variability, production costs can differ from one area to another and even between adjacent farms or ranches.

Custom rates reported in this publication are based on the four geographic regions of Idaho corresponding to the administrative units defined

by University of Idaho Extension. They are similar to the state regions used by the National Agricultural Statistics Service Idaho Field Office for data collection.

- **Northern Idaho** (extension district #1) covers Benewah, Bonner, Boundary, Clearwater, Idaho, Kootenai, Latah, Lewis, Nez Perce, and Shoshone counties.
- **Southwestern Idaho** (extension district #2) covers Ada, Adams, Boise, Canyon, Elmore, Gem, Owyhee, Payette, Valley, and Washington counties.
- **Southcentral Idaho** (extension district #3) covers Blaine, Butte, Camas, Cassia, Custer, Gooding, Jerome, Lemhi, Lincoln, Minidoka, and Twin Falls counties.
- **Eastern Idaho** (extension district #4) covers Bannock, Bear Lake, Bingham, Bonneville, Caribou, Clark, Franklin, Fremont, Jefferson, Madison, Oneida, Power, and Teton counties.

Because of low rainfall, irrigation is essential to crop production in most parts of the Snake River Plain across southern Idaho. Farming practices, field size and shape, and types of equipment all are influenced by irrigation in these areas, and farming practices are comparable across much of the irrigated portions of southern Idaho. Northern Idaho agriculture is quite different. Northern Idaho does share some cultural practices and machinery types with dryland grain-producing areas of eastern and southern Idaho.

Calculating Machine Costs

Information about custom operations and rates is not always available. If this is the case in your area, you may need to calculate the cost of performing a particular task. Machine costs can be separated into time-related and use-related categories. Time-related expenses may be classified as ownership costs, while use-related costs may be referred to as operating costs. As might be expected, machine costs do not always fall neatly into a particular category. For example, depreciation is a function of both time and use.

For clarity, this publication follows the traditional conventions of classifying costs shown below:

Ownership costs—

- Annual depreciation
- Interest on the value of the machinery and equipment
- Property taxes on the machine (if applicable)

Table 1. Estimating costs of owning and operating farm machinery, using a plowing example.

	165 hp tractor	4 bottom (plow)
Equipment factors		
1. Purchase price ¹	\$112,000	\$12,600
2. Expected ownership period (years) ²	12	10
3. Salvage value ³	\$28,000	\$2,600
4. Adjusted average value ⁴	\$73,500	\$8,100
5. Estimated annual hours of use	600	150
Annual ownership cost		
6. Depreciation ⁵	\$7,000	\$1,000
7. Interest ⁶ : 6%	\$4,410	\$486
8. Taxes, housing, insurance (see Table 3) ⁷	\$809	\$41
9. Annual ownership cost (line 6 + line 7 + line 8)	\$12,219	\$1,527
10. Ownership cost per hour (line 9 + line 5)	\$20.37	\$10.18
Annual operating cost		
11. Repairs and maintenance per hour ⁸	\$9.30	\$6.30
12. Fuel consumption: gallons per hour ⁹	7.3	—
13. Fuel and lubrication cost per hour ¹⁰	\$21.00	—
14. Labor (\$12.50/hr x 1.1) ¹¹	\$13.75	—
15. Materials needed (twine, etc.) ¹²	\$0	—
16. Total operating cost per hour (lines 11 + 13 + 14 + 15)	\$44.05	\$6.30
Total cost		
17. Total cost per hour (line 10 + line 16)	\$64.42	\$16.48
18. Total cost of plowing operation per hour	\$80.90	
19. Total cost per acre (\$80.90/hour ÷ 2.78 acres per hour)¹³	\$29.10	

- Insurance
- Shelter

Operating costs —

- Fuel and lubrication
- Maintenance and repairs
- Supplies used in the operation (baler twine, for example)
- Labor

Your own machinery records are the best resource for cost information. However, if records are lacking, you can make a cost estimate as shown in table 1. The moldboard plow example in table 1 shows that costs must be calculated on both the tractor and plow. Costs of the two pieces of equipment are calculated separately because the tractor is used for a different number of hours, and the tractor and plow have different cost factors and different rates of depreciation.

¹ Purchase price is the price paid for the machinery, whether new or used.

² The expected ownership period is the years of useful life or the number of years until the machine will be traded. Table 2 lists estimated total hours of useful life for various types of equipment, which can be used to estimate the years of useful life if the hours of annual use are known. In this example, the tractor is used 600 hours per year and the plow 150 hours.

³ Salvage value is the expected selling price or trade-in value of the machine at the end of its ownership period.

⁴ Average value = (Purchase price + Salvage value) ÷ 2. This value is often used in machinery cost calculations. But using this unadjusted average will underestimate the interest charge on capital because it is an end-of-period value. To get a beginning-of-the-investment-period value, simply add a year of depreciation. The adjusted formula used in this example is: (Purchase price + Salvage value + Annual depreciation) ÷ 2.

⁵ An estimate of annual depreciation should be used. Depreciation is the loss in value over the machine's ownership period. Management depreciation (based on years of useful life) rather than tax depreciation (based on the IRS's tax life) should be used. Straight-line depreciation ((Purchase price – Salvage value) ÷ Years of useful life) was used. More complicated depreciation methods can be used but still will produce an estimate. Depreciation will be known only when the machine is sold or traded.

⁶ Interest is an opportunity cost of capital and is charged against the adjusted average value using a real rate of interest. A real (inflation-adjusted) interest rate of 6 percent was used in the example calculation. Interest should be charged for all capital, not on just the amount borrowed.

⁷ The charge for taxes, housing, and insurance is based on the values shown in table 3 (1.1% for tractor and 0.5% for plow) multiplied by the adjusted average value.

⁸ Repairs and maintenance costs are based on the repair factor coefficients per \$1,000 of purchase price, which are found in table 2, or (Purchase price ÷ 1,000) x .083 (for tractor) and x 0.5 (for plow).

⁹ Fuel consumption per hour is based on an engineering equation that relates PTO horsepower to fuel consumption per hour. For diesel, the factor is 0.044 and for gasoline 0.060. Fuel consumption = 165 x 0.044 = 7.3 gallons per hour.

¹⁰ Fuel costs per hour are based on the estimated fuel consumption per hour (7.3 gallons) times a cost of off-road diesel, \$2.50 in this example, or 7.3 x \$2.50 = \$18.25 per hour. Lubricant costs are estimated using a standard engineering coefficient of 15% of fuel costs, or 0.15 x \$18.25 = \$2.74. Fuel and lubricant costs = \$18.25 + \$2.74 = \$20.99 rounded to \$21.00.

¹¹ Labor is based on a wage rate of \$12.50 hour, which includes benefits. This is adjusted by 10 percent to account for time spent servicing equipment and travel. This converts the cost per hour of labor to a cost per hour of machine operating time. The adjusted labor rate is \$13.75. The appropriate labor adjustment factor will vary by type of operation and travel distances.

¹² When materials (baling twine, seed, chemicals, etc.) are furnished by the custom operator, these should be included.

¹³ Acres per hour of 2.78 is based on a plow width of 6 feet (18" bottoms), a speed of 4.5 miles per hour, and a field efficiency of 85%. These last two factors are the midpoints for the range of values shown in table 2.

Note that the labor is charged only once because only one operator is needed for both pieces of equipment. Be sure to add the cost of materials, such as chemicals, seed, twine, fertilizer, etc., when these are provided by the custom operator. In this example the tractor's cost per hour is \$64.42, the plow's cost per hour is \$16.48, for a total of \$80.90 per hour for the plowing operation. If 2.78 acres are covered per hour, the cost per acre is about \$29.10.

Acres covered per hour can be estimated based on your own experience or by using the following formula:

$$\frac{\text{Acres per hour} = \text{Speed (mph)} \times \text{machine width (ft)} \times \text{machine's field efficiency (\%)}}{8.25}$$

For example, if a 16-foot wide machine travels at 4 miles per hour and has a field efficiency of 70 percent, the calculation would be as follows:

$$\frac{4 \text{ mph} \times 16 \text{ feet} \times .70}{8.25} = 5.4 \text{ acres per hour}$$

Typical speeds and field efficiencies for different types of machinery are shown in table 2. Field efficiency is less than 100 percent because of equipment overlap, turning time, and time required to adjust and service machinery and to fill hoppers and tanks when inputs are being applied.

One reference for estimating machinery costs is PNW Extension Publication 346, *Costs of Owning and Operating Farm Machinery in the Pacific Northwest*, by Robert L. Smathers. The publication is available through the UI Extension office in your county or online at info.ag.uidaho.edu. Look in the catalog under the heading Farm Structures and Machinery. Estimates by Smathers are based on new machinery costs and a range of expected total hours of use during the life of the machine.

Another useful resource is the Machinery Cost Analysis Windows-based computer program available from the UI Department of Agricultural Economics and Rural Sociology web site: <http://www.ag.uidaho.edu/aers>. Click on Resources and then on Software.

Custom Rates Index

Custom rates change when costs associated with ownership and operation of farm machinery and equipment change. Four USDA farm price index-

es were used to develop a weighted composite index that can be used to adjust historical custom rate values. Table 4 shows the individual indexes as well as the composite index from 1994 through 2004. The four indexes cover machinery prices, wage rates, fuel prices, and interest rates and were given the following weights in calculating the composite index: 0.5, 0.25, 0.15 and 0.1, respectively.

A USDA Custom Rates Index is also shown in table 4. This index tracks what farmers report paying for custom services. Table 4 also shows how both the composite index and the custom rates indexes changed from one year to the next. The percentage change from 1994 to 2004 for the composite index is 46.8 percent, while the custom rates index changed by only 20.2 percent. This illustrates the problem faced by many custom operators. The composite index tracks how custom operators' costs have changed, while the custom rates index shows how much of these costs have been passed on to customers. Cost efficiencies from using larger equipment and covering more acres have helped some custom operators deal with this cost-price squeeze, but many others have simply gone out of business.

The composite index would reflect costs for operators using new equipment. Actual custom rate changes may lag behind the index somewhat because many custom operators use machinery and equipment purchased in previous years. Those who use an index as a guide should also be aware that labor, fuel, and machinery costs in different operations can vary considerably. Thus, different weights for machinery, wages, and fuels may be appropriate.

All indexes in table 4 are based on national cost and price data. Values for Idaho may be slightly different. These indexes should be used as a guide for making rough estimates of custom rate changes from year to year in the absence of actual market data. Data needed to keep these indexes current can be found in USDA's annual agricultural prices summary. This is available on the Internet by going to the USDA's Economics, Statistics, and Market Information System (<http://usda.mannlib.cornell.edu>). Click on Economics and Management.

Table 2. Farm machinery field efficiencies, field speeds, hours of useful life, and repair and maintenance factors.

	Field efficiency		Field speed		Estimated life	Total life R&M cost¹	Repair factor/hr²
	Range	Typical	Range	Typical			
	(%)	(%)	(mph)	(mph)	(hr)	(% of list price)	(per \$1000 of list price)
Tractors							
2 wheel drive and stationary					12,000	100	0.083
4 wheel drive and crawler					16,000	80	0.050
Tillage and planting implements							
Moldboard plow	70-90	85	3.0 to 6.0	4.5	2,000	100	0.500
Heavy-duty disk	70-90	85	3.5 to 6.0	4.5	2,000	60	0.300
Tandem disk harrow	70-90	80	4.0 to 7.0	6.0	2,000	60	0.300
(Coulter) chisel plow	70-90	85	4.0 to 6.5	5.0	2,000	75	0.375
Field cultivator	70-90	85	5.0 to 8.0	7.0	2,000	70	0.350
Spring tooth harrow	70-90	85	5.0 to 8.0	7.0	2,000	70	0.350
Roller-packer	70-90	85	4.5 to 7.5	6.0	2,000	40	0.200
Mulcher-packer	70-90	80	4.0 to 7.0	5.0	2,000	40	0.200
Rotary hoe	70-85	80	8.0 to 14.0	12.0	2,000	60	0.300
Row crop cultivator	70-90	80	3.0 to 7.0	5.0	2,000	80	0.400
Rotary tiller	70-90	85	1.0 to 4.5	3.0	1,500	80	0.533
Row crop planter	50-75	65	4.0 to 7.0	5.5	1,500	75	0.500
Grain drill	55-80	70	4.0 to 7.0	5.0	1,500	75	0.500
Harvesting equipment							
Corn picker sheller	60-75	65	2.0 to 4.0	2.5	2,000	70	0.350
Combine	60-75	65	2.0 to 5.0	3.0	2,000	60	0.300
Combine, self-propelled	65-80	70	2.0 to 5.0	3.0	3,000	40	0.133
Mower	75-85	80	3.0 to 6.0	5.0	2,000	150	0.750
Mower (rotary)	75-90	80	5.0 to 12.0	7.0	2,000	175	0.875
Mower-conditioner	75-85	80	3.0 to 6.0	5.0	2,500	80	0.320
Mower-conditioner (rotary)	75-90	80	5.0 to 12.0	7.0	2,500	100	0.400
Windrower, self-propelled	70-85	80	3.0 to 8.0	5.0	3,000	55	0.183
Side delivery rake	70-90	80	4.0 to 8.0	6.0	2,500	60	0.240
Small rectangular baler	60-85	75	2.5 to 6.0	4.0	2,000	80	0.400
Large rectangular baler	70-90	80	4.0 to 8.0	5.0	3,000	75	0.250
Large round baler	55-75	65	3.0 to 8.0	5.0	1,500	90	0.600
Forage harvester	60-85	70	1.5 to 5.0	3.0	2,500	65	0.260
Forage harvester, self-propelled	60-85	70	1.5 to 6.0	3.5	4,000	50	0.125
Sugarbeet harvester	50-70	60	4.0 to 6.0	5.0	1,500	100	0.667
Potato harvester	55-70	60	1.5 to 4.0	2.5	2,500	70	0.280
Cotton picker, self-propelled	60-75	70	2.0 to 4.0	3.0	3,000	80	0.267
Miscellaneous equipment							
Fertilizer spreader	60-80	70	5.0 to 10.0	7.0	1,200	80	0.667
Boom-type sprayer	50-80	65	3.0 to 7.0	6.5	1,500	70	0.467
Air-carrier sprayer	55-70	60	2.0 to 5.0	3.0	2,000	60	0.300
Bean puller-windrower	70-90	80	4.0 to 7.0	5.0	2,000	60	0.300
Beet topper/stalk chopper	70-90	80	4.0 to 7.0	5.0	1,200	35	0.292
Forage blower					1,500	45	0.300
Forage wagon					2,000	50	0.250
Wagon					3,000	80	0.267

Source: American Society of Agricultural Engineers Standards, Agricultural Machinery Data Management: ADSR D497.4 Feb03.

¹Total life R&M cost is the accumulated repair and maintenance cost over the entire useful life as a percentage of the machine's list price.

²The repair factor per hour is derived by using the percent of list price total life R&M cost from ASAS Standards to calculate the lifetime accumulated repairs per \$1,000 of list price and dividing this value by the total number of hours of useful life. This method will overestimate repairs and maintenance costs for machinery owned less than the estimated life. These repair factors were used to estimate repair costs on the tractor and plow in table 1.

Table 3. Percentage of average machine value used to estimate property taxes, housing, and insurance (THI) for selected machinery.

	Taxes ¹	Housing ²	Insurance ³	Total
Wheel tractor	0	0.3	0.8	1.1
Crawler tractor	0	0.2	0.8	1.0
Combine	0	0.5	1.5	2.0
Potato harvester	0	1.4	0.5	1.9
Bean cutter	0	1.1	0.5	1.6
Self-propelled forage harvester	0	1.3	1.5	2.8
Pull-type forage harvester	0	1.3	1.5	2.8
Self-propelled windrower	0	1.1	1.5	2.8
Bean windrower	0	1.1	0.5	1.6
Hay rake	0	—	0.5	0.5
Hay baler	0	1.9	0.5	2.4
Self-propelled automatic bale wagon	0	1.0	1.5	2.5
Pull-type automatic bale wagon	0	1.0	0.5	1.5
Self-unloading forage wagon	0	—	0.5	0.5
Drill, planters	0	2.4	0.5	2.9
Tillage equipment	0	—	0.5	0.5
Sprayer	0	—	0.5	0.5

¹ Idaho has discontinued charging property tax on farm machinery. A rate of 1% is often used to estimate property tax in states where it still exists.

² Housing costs can be expressed as a percentage of purchase price, list price, average value, or adjusted average value. Another approach is to estimate the value of the storage area required to place the equipment under cover. First, estimate the number of square feet required to store equipment, multiply this by the cost per square foot to build the storage, and amortize this over the useful life of the machine shed. The rate will depend on the type of shelter. A rate between 30¢ and 40¢ per square foot would provide a reasonable estimate based on current construction costs.

³ When insurance costs on machinery are unknown, insurance on machinery can be estimated using a percentage of purchase price, list price, average value, or adjusted average value. Insurance rates per \$100 of value typically range between 0.4 and 0.6 for most tillage and pull-type harvesting equipment. Rates for tractors and self-propelled machinery are typically higher, ranging between 0.65 and 2.0 percent.

Survey Data

From October 2005 to April 2006, custom operators, farmers, and other agribusiness firms in Idaho were contacted about custom rates charged or paid for various farm operations. Names were obtained from extension agricultural educators, classified sections of newspapers, commodity directories, other farmers, and custom operators. Respondents were contacted by telephone or by mail. Some respondents reported rates charged in 2005 because they had not yet set rates for 2006, while others supplied the rates they planned to charge for the 2006 crop year.

Appendix tables A through D summarize the custom rate information collected in the survey. Each table presents custom rates reported for common tillage, planting, and harvesting operations for major crops. For most entries, the low, high, and average rates are given, along with the number of responses. Rates vary because of differences

in conditions, types of equipment, and methods of determining rates. Costs of materials such as chemicals, seed, and fertilizer are not included in the custom rates quoted, unless specified otherwise.

Custom rates quoted here should be used as guidelines, not as the definitive rate to charge. Prevailing conditions such as weather, field shape and size, and other factors affecting ease or difficulty of operation should be considered. Users should also be aware that rates quoted might not be representative of an entire area or region.

Table 4. USDA indexes of prices paid and custom rates, 1994 to 2004.

Year	Prices paid indexes ¹					Composite index percent change	USDA custom rate index ⁴	Custom rate index percent change
	Machinery ²	Fuel	Wages	Interest	Composite ³			
1994	113	89	111	94	107		104	
1995	120	89	114	102	112	5%	111	7%
1996	125	102	117	106	118	5%	113	2%
1997	128	106	123	105	121	3%	115	2%
1998	132	84	129	104	121	0%	117	2%
1999	135	93	135	106	126	4%	115	-2%
2000	139	134	140	113	136	8%	120	4%
2001	144	119	146	109	137	1%	121	1%
2002	148	112	153	104	139	2%	120	-1%
2003	151	140	157	102	146	5%	125	4%
2004	162	163	161	103	156	7%	125	0%

Source: USDA-NASS, Agricultural Prices Annual Summary (various years).

¹ Index values are calculated using 1990-92 as the base years when the index values equal 100.

² Machinery index is a composite of tractors, self-propelled, and other machinery.

³ The composite custom rate index is estimated by weighting the individual component indexes as follows: machinery at 50 percent, fuel 15 percent, wages 25 percent, and interest 10 percent. The composite index was developed by the authors and is presented as an alternative to the USDA custom rates index.

⁴ The custom rates index is a USDA calculated index.

Conclusion

Hiring a custom operator provides a reasonable way to accomplish work when lacking the necessary machinery or time. Performing custom work for others can help machine owners make more efficient use of their resources by spreading ownership costs over more acres and reducing machine cost per unit of output without incurring the expense of acquiring more land.

There was a wide range in the number of responses for each operation in the survey and in some cases only a single response. Take this into consideration when using these data. Prevailing conditions that would increase or decrease the costs should also be considered. For example, some custom operators in irrigated regions charge more for fields with furrow irrigation than for fields with sprinkler irrigation. Rocky or rough field conditions also results in higher charges.

While custom rates have increased since the last update of this publication in 1999-2000, most rates have not increased as fast as the prices paid index values (table 4). These index values suggest custom rates have increased less than ownership and operating costs for equipment. One cost factor on custom rates that does not show up in the appendix tables is the set-up fee that a number of cus-

tom operators now charge in addition to per-unit charges. Other custom operators have started charging a fuel surcharge. Volatile and uncertain fuel prices in recent years left some custom operators in a money-losing situation when they bid jobs when fuel prices were low and did not include a provision for a fuel surcharge in the contract. In some regions, the rate is quoted minus fuel, which the person hiring the custom operator is expected to supply.

Appendix

Table A. Northern Idaho custom rates, 2005-06.

Operation	Unit	Responses	Rate	
			Range	Average ¹
DRY FERTILIZER APPLICATION				
Ground	acre	8	\$5.00–\$7.00	\$6.15
Aerial				
Up to 100 lb	acre	6	\$5.25–\$6.50	\$5.90
Cents/lb over 100	lb	6	5.75¢–6.5¢	6.0¢
LIQUID FERTILIZER APPLICATION				
Ground spray	acre	7	\$5.00–\$10.00	\$6.65
Shank-in (chisel/field cult.)	acre	5	\$6.00–\$11.00	\$8.00
CHEMICAL APPLICATION				
Ground spray				
No rate specified	acre	6	\$5.25–\$8.00	\$6.60
10 gpa	acre	2	\$4.50–\$5.50	\$4.75
20 gpa	acre	1	\$5.50	\$5.50
Aerial spray				
3-gallon	acre	3	\$5.75	\$5.75
5-gallon	acre	7	\$5.35–\$6.25	\$5.80
6-gallon	acre	2	\$5.90–\$6.00	\$5.95
7-gallon	acre	5	\$6.00–\$6.60	\$6.30
10-gallon	acre	3	\$6.70–\$7.50	\$7.05
Added charges:				
Replace H ₂ O as carrier	gal	1	\$0.26	\$0.26
Small acreage or spot spray	acre	1	\$1.25	\$1.25
LAND PREPARATION				
9-Bottom up-hill plowing	acre	1	\$22.00	\$22.00
Chisel plow	acre	3	\$7.00–\$14.25	\$11.10
Tandem disk	acre	2	\$12.00–\$13.00	\$12.50
Offset disk	acre	1	\$22.00	\$22.00
Field cultivator/culta- weeder	acre	4	\$7.00–\$8.75	\$8.05
Field cultivator with chemical application	acre	4	\$7.00–\$11.00	\$9.25
Heavy harrow–stubble buster	acre	1	\$6.50	\$6.50
Packer with harrow	acre	1	\$8.00	\$8.00
Harrow (spike-tooth)	acre	2	\$4.50–\$5.00	\$4.75
PLANTING GRAIN & LEGUMES				
Aerial	acre	1	\$5.50	\$5.50
Broadcast	acre	1	\$7.00	\$7.00
Conventional drill	acre	3	\$9.50–\$14.00	\$11.50

Operation	Unit	Responses	Rate	
			Range	Average ¹
PLANTING GRAIN & LEGUMES (continued)				
No-till drill	acre	2	\$18.00–\$19.00	\$18.50
Seeding into grass sod	acre	1	\$23.00	\$23.00
Drill rental (no tractor)	acre	2	\$12.00–\$12.50	\$12.25
Air seeder: flex-coil	acre	3	\$20.00–\$25.00	\$22.50
HARVESTING HAY/STRAW				
Swath without conditioner	acre	1	\$15.00	\$15.00
Swath with conditioner	acre	2	\$18.00–\$20.00	\$19.00
Bale				
Large rectangular (4x4)	bale	2	\$18.00–\$19.00	\$18.50
Large rectangular (4x4) straw	ton	2	\$18.00–\$19.00	\$18.50
Combination/package: 4x4				
Bale & stack	ton	1	\$25.00	\$25.00
COMBINE SMALL GRAINS & LEGUMES				
Small grains: flat rate	acre	2	\$22.00–\$24.00	\$23.00
Small grains: 40 bushels	acre	1	\$20.00	\$20.00
+ Charge per bushel > 40	bu	1	\$0.25	\$0.25
Barley (includes short haul)	ton	1	\$18.00	\$18.00
Minimum charge	acre	1	\$24.00	\$24.00
Wheat (includes short haul)	bu	1	\$0.49	\$0.49
Minimum	acre	1	\$24.00	\$24.00
Small grains: no haul	hour	2	\$150–\$195	\$172.00
Legumes: peas, lentils, garbanzos	acre	2	\$39.00–\$40.00	\$39.50
OTHER				
Mowing	acre	2	\$10.00–\$16.00	\$13.00
Chop straw	acre	1	\$9.00	\$9.00
EQUIPMENT RENTAL				
Sprayer for ATV	day	1	\$60.00	\$60.00
Spinner for ATV	day	1	\$60.00	\$60.00
Slip tank	day	1	\$45.00	\$45.00
Sprayer	acre	1	\$1.50	\$1.50
Barber spreader	acre	1	\$1.75	\$1.75
Spinner spreader	acre	1	\$2.00	\$2.00
Valmar without harrow	acre	1	\$2.00	\$2.00
Valmar with harrow	acre	1	\$2.50	\$2.50
Weed-wiper	acre	1	\$3.00	\$3.00
No-till drill	acre	2	\$12.00–\$12.50	\$12.25

¹ Averages are generally rounded to the nearest \$0.05.

¹ Averages are generally rounded to the nearest \$0.05.

Table B. Southwestern Idaho custom rates, 2005-06.

Operation	Unit	Responses	Rate		Operation	Unit	Responses	Rate	
			Range	Average ¹				Range	Average ¹
DRY FERTILIZER APPLICATION					LAND PREPARATION (continued)				
Ground					Field work (includes plow, hour disk, roller harrow & corrugate)				
Air machine	acre	3	\$6.50–\$7.25	\$6.90			4	\$55.00–\$80.00	\$71.25
Spinner truck	acre	3	\$5.50–\$7.25	\$6.25	Corrugate	hour	1	\$35.00	\$35.00
Apply fertilizer & seed	acre	1	\$7.50	\$7.50	Corrugate	acre	1	\$12.00	\$12.00
Variable rate application (includes grid sampling)	acre	1	\$13.00	\$13.00	Land plane	hour	1	\$60.00	\$60.00
					Weed/pasture mowing	acre	2	\$8.00	\$8.00
Aerial					MARKOUT & BEDDING				
Up to 100 lb	acre	6	\$6.35–\$10.00	\$8.35	Dry	acre	1	\$15.00	\$15.00
cents/lb over 100 lb	lb	6	4.0¢–10.0¢	7.1¢	Wet: liquid fertilizer	acre	3	\$14.50–\$17.00	\$15.50
Dust–30 lb	acre	1	\$8.85	\$8.85	Wet: liquid fertilizer + GPS	acre	1	\$18.50	\$18.50
+ cents/lb > 30 lb	lb	1	8.5¢	8.5¢	PLANTING & SEEDING				
Seeding	acre	2	\$8.25–\$10.00	\$9.15	Alfalfa/grass seeding	acre	1	\$12.00	\$12.00
LIQUID FERTILIZER APPLICATION					Corn	acre	2	\$12.00–\$15.00	\$13.50
Markout	acre	2	\$14.50–\$15.00	\$14.75	Mint	acre	1	\$100.00	\$100.00
Markout w/GPS	acre	1	\$18.50	\$18.50	Onions	acre	1	\$15.00	\$15.00
Sidedress	acre	2	\$10.75–\$12.00	\$11.40	Potatoes	acre	1	\$45.00	\$45.00
CHEMICAL APPLICATION					Small grains	acre	2	\$16.00–\$18.00	\$17.00
Ground spray					Small grains	hour	1	\$80.00	\$80.00
Crop not specified	acre	3	\$6.00–\$8.50	\$7.50	HARVESTING HAY/STRAW				
Potatoes/sugarbeets	acre	1	\$8.50	\$8.50	Swath, with conditioner	acre	11	\$12.00–\$18.00	\$15.60
Ground spray & incorporate	acre	1	\$12.00	\$12.00	Swath, no conditioner	acre	3	\$12.00–\$13.50	\$12.50
Fumigate					Swath	ton	1	\$7.00	\$7.00
Bedding row	acre	2	\$18.50	\$18.50	Mow & rake (small acreage)	acre	1	\$15.00	\$15.00
Deep injection	acre	2	\$20.00–\$27.50	\$23.75	Rake/turn hay	acre	5	\$5.00–\$12.00	\$8.40
Sulfuric acid					Rake	ton	1	\$0.50	\$0.50
Application & material	acre	1	\$18.75	\$18.75	Bale				
Aerial spray					2-String	bale	9	\$0.45–\$0.55	\$0.49
3-gallon	acre	3	\$4.50–\$7.00	\$5.75	3-String	ton	1	\$18.00	\$18.00
5-gallon	acre	5	\$6.50–\$9.00	\$7.95	Large rectangular (3x4)	bale	1	\$12.00	\$12.00
7 to 7.5-gallon	acre	5	\$8.00–\$9.50	\$8.90	Large rectangular (4x4)	bale	6	\$12.00–\$16.00	\$13.65
10-gallon	acre	6	\$10.00–\$11.00	\$10.40	Retrieve & stack (includes short haul < 1 mile)				
12.5-gallon	acre	1	\$12.70	\$12.70	2-String	bale	5	\$0.35–\$0.50	\$0.43
15-gallon	acre	2	\$15.00–\$15.70	\$15.35	+ \$ per mile per load	mile	1	\$1.45	\$1.45
20-gallon	acre	2	\$17.55–\$22.00	\$19.75	3-String	bale	1	\$0.43	\$0.43
30-gallon	acre	1	\$25.95	\$25.95	3-String: block stacking	ton	1	\$7.00	\$7.00
Ultra low volume	acre	1	\$8.50	\$8.50	Large rectangular	bale	4	\$5.00	\$5.00
LAND PREPARATION					Combination/package				
Moldboard plow	acre	4	\$17.00–\$24.00	\$20.25	Swath, rake, bale & stack: 4 x 4	ton	2	\$32.00–\$40.00	\$36.40
Deep rip/subsoil	acre	3	\$16.50–\$20.00	\$17.85	Swath, rake & bale: 4 x 4	ton	1	\$25.00	\$25.00
Disk-ripper	acre	1	\$21.00	\$21.00	Swath, rake, bale & stack: 3 x 4	ton	1	\$32.50	\$32.50
Disk	acre	5	\$10.00–\$16.00	\$12.00	Swath, bale & stack: 3x4–pre-sliced	ton	1	\$30.00	\$30.00
Triple K	acre	1	\$12.00	\$12.00	Swath, rake, bale & stack: 16 x 18	ton	1	\$26.00	\$26.00
Roto-tilling	acre	1	\$20.00	\$20.00					
Groundhog	acre	2	\$10.00–\$17.00	\$13.50					

continued next page

Table B. Southwestern Idaho custom rates, 2005-06, *cont.*

Operation	Unit	Responses	Rate	
			Range	Average ¹
HARVESTING HAY/STRAW (continued)				
Combination/package (continued)				
Swath & rake	acre	1	\$22.00	\$22.00
Bale & stack (4x4)	ton	1	\$20.00	\$20.00
HARVESTING OTHER FORAGE CROPS				
Corn silage				
Chop, short haul & pack	ton	4	\$7.50–\$8.00	\$7.80
+ \$/ton mile > short haul	ton mile	2	\$0.15–\$0.25	\$0.20
Chop & short haul: < 1 mile	ton	1	\$5.50	\$5.50
+ \$/ton mile > 1 mile	ton mile	1	\$0.15	\$0.15
Chop only	ton	1	\$3.00	\$3.00
Haul only: < 1 mile	ton	1	\$3.00	\$3.00
+ \$/ton mile > 1 mile	ton mile	1	\$0.25	\$0.25
Pit packing	ton	2	\$1.00–\$1.50	\$1.25
Bag silage	ton	1	\$5.00	\$5.00
Green chop: hay & grain				
Chop, haul & pit	ton	4	\$7.25–\$8.00	\$7.90
Chop only	ton	2	\$2.50	\$2.50
Haul only: <5 miles	ton	1	\$3.00	\$3.00
+ \$/ton mile > 1 mile	ton mile	1	\$0.25	\$0.25
Bag silage	ton	1	\$5.00	\$5.00
COMBINE ALFALFA SEED, DRY BEANS, CORN, SMALL GRAINS				
Alfalfa seed	acre	1	\$60.00	\$60.00
Dry beans (commercial)	acre	1	\$55.00	\$55.00
Corn grain	acre	4	\$33.00–\$36.00	\$33.50
Small grains–irrigated	acre	6	\$26.00–\$36.00	\$31.50
Small grains–dryland	acre	1	\$16.00	\$16.00
Small grains–minimum	acre	1	\$12.00	\$12.00
+ \$/bu	bu	1	\$0.12	\$0.12
+ \$/bu hauling	bu	1	\$0.12	\$0.12
HARVESTING POTATOES, ONIONS & SUGARBEETS				
Onions (top & load)	cwt	1	\$0.50	\$0.50
Potatoes (dig)	cwt	1	\$0.40	\$0.40
HAULING				
Corn grain: short haul	ton mile	1	\$0.17	\$0.17
Small grains: < 10 miles	ton	2	\$4.00–\$6.50	\$5.25
Potatoes: short haul	cwt	1	\$0.35	\$0.35
Silage: < 1 mile	ton	1	\$3.00	\$3.00
+ \$/ton mile >1 mile	ton mile	2	\$0.15–\$0.25	\$0.20
Manure (1 mile)	load	2	\$24.00–\$26.50	\$25.25
\$/mile over 1 mile	load mile	1	\$1.00	\$1.00

Operation	Unit	Responses	Rate	
			Range	Average ¹
OTHER				
Mint still	lb	1	\$3.50	\$3.50
Soil mapping for variable rate	acre	1	\$13.00	\$13.00
General labor: spot jobs	hr	1	\$15.50	\$15.50

¹ Averages are generally rounded to the nearest \$0.05.

Table C. Southcentral Idaho custom rates, 2005-06.

Operation	Unit	Responses	Rate	
			Range	Average ¹
DRY FERTILIZER APPLICATION				
Ground application				
Broadcast: all rates & crops	acre	5	\$5.00–\$6.00	\$5.50
Fertilizer + seed	acre	1	\$6.50	\$6.50
Broadcast: all crops by rate				
0–500 lb/acre	acre	5	\$4.50–\$6.25	\$5.30
501–750 lb/acre	acre	5	\$5.50–\$7.00	\$6.10
751–1000 lb/acre	acre	5	\$6.00–\$7.75	\$6.95
> 1000 lb/acre	acre	4	\$6.50–\$8.75	\$7.75
+\$ /acre when seeder bin is used	acre	1	\$2.00	\$2.00
+\$ /acre when impregnated fertilizer is applied	acre	1	\$1.00	\$1.00
Aerial				
Up to 100 lb	acre	8	\$5.95–\$9.00	\$7.50
+ cents/lb over 100 lb	lb	6	5.0¢–9.0¢	6.8¢
LIQUID FERTILIZER APPLICATION				
Neutral				
Up to 30 gal/acre	acre	1	\$5.75	\$5.75
31 to 60 gal/acre	acre	1	\$6.00	\$6.00
61 to 80 gal/acre	acre	1	\$6.25	\$6.25
Non-neutral				
Up to 30 gal/acre	acre	1	\$7.50	\$7.50
31 to 60 gal/acre	acre	1	\$8.00	\$8.00
61 to 80 gal/acre	acre	1	\$8.50	\$8.50
CHEMICAL APPLICATION				
Ground spray				
No rate or crop specified	acre	7	\$5.15–\$6.90	\$6.15
Up to 10 gallons	acre	4	\$5.50–\$5.80	\$5.65
11–15 gallons	acre	4	\$5.50–\$7.00	\$6.15
16–25 gallons	acre	4	\$6.00–\$7.50	\$6.65
> 25 gallons	acre	1	\$7.35	\$7.35
Grain & alfalfa	acre	5	\$5.00–\$6.96	\$5.70
Row crops	acre	4	\$6.40–\$7.90	\$6.95
Sugarbeet band-spray	acre	2	\$7.00–\$7.90	\$7.45
Spray & incorporate with roller harrow	acre	1	\$12.00	\$12.00
Spray & incorporate w/disk	acre	1	\$17.00	\$17.00
Fumigate				
Deep injection	acre	1	\$27.00	\$27.00
Sulfuric acid application				
10–15 gal/acre	acre	1	\$8.10	\$8.10
16–25 gal/acre	acre	4	\$8.70–\$9.25	\$8.95
26+ gal/acre	acre	1	\$9.20	\$9.20
Aerial spray				
3-gallon	acre	2	\$4.30–\$5.00	\$4.65
4-gallon	acre	3	\$5.90–\$8.45	\$7.45
5-gallon	acre	7	\$5.50–\$8.95	\$7.35
7-gallon	acre	6	\$6.60–\$9.50	\$8.00
10-gallon	acre	4	\$7.55–\$12.00	\$9.90

Operation	Unit	Responses	Rate	
			Range	Average ¹
LAND PREPARATION				
Moldboard plow (stubble)	acre	10	\$20.00–\$28.00	\$23.70
Moldboard plow (hay)	acre	5	\$30.00–\$32.00	\$30.40
Deep rip	acre	3	\$25.00–\$30.00	\$26.65
Disc-ripper	acre	4	\$26.00–\$30.00	\$28.00
Disk, subsoil with packer	acre	1	\$22.00	\$22.00
Crowner	acre	1	\$16.00	\$16.00
Chisel plow	acre	6	\$13.00–\$21.00	\$16.50
Offset disk	acre	10	\$12.00–\$20.00	\$16.40
Tandem disk	acre	6	\$12.00–\$17.00	\$13.60
Roller harrow	acre	11	\$8.00–\$16.00	\$13.35
Harrow	acre	2	\$5.00–\$7.00	\$6.00
Corrugate	acre	5	\$10.00–\$17.00	\$13.00
Cultivate	acre	6	\$7.00–\$16.50	\$13.10
Cultivate + incorporate	acre	1	\$16.00	\$16.00
Basin tillage/damner dike	acre	3	\$16.50–\$18.00	\$17.15
Basin tillage/damner dike + spray	acre	1	\$18.00	\$18.00
MARKOUT, BEDDING & FUMIGATION				
Markout: dry	acre	2	\$14.00	\$14.00
Markout: 1 product	acre	5	\$14.50–\$18.00	\$16.00
Markout: 2 products	acre	2	\$17.50	\$17.50
Markout: 3 products	acre	2	\$20.50	\$20.50
Markout: deep rip w/fertilizer	acre	1	\$25.00	\$25.00
Markout & apply Telone	acre	3	\$32.00–\$36.00	\$34.65
Markout & apply Vapam	acre	3	\$32.00–\$34.00	\$32.35
Markout & apply: Vapam + Telone	acre	2	\$42.00	\$42.00
Fumigation: shank-in	acre	1	\$34.00	\$34.00
PLANTING & SEEDING				
Alfalfa & grass	acre	1	\$10.00–\$12.00	\$11.00
Dry beans	acre	3	\$14.00–\$16.00	\$15.35
Corn	acre	9	\$12.00–\$16.00	\$13.90
Corn with starter fertilizer	acre	4	\$14.00–\$15.00	\$14.50
Small grains	acre	6	\$10.00–\$18.00	\$13.85
Potatoes	acre	1	\$25.00	\$25.00
Sugarbeets	acre	4	\$14.00–\$18.00	\$16.00
Small grain, alfalfa & grass				
Seedbed prep & plant	acre	5	\$12.00–\$16.00	\$14.10
Seedbed prep, plant & fertilize	acre	2	\$14.00–\$17.50	\$15.75
Air seed				
50 lb/ac or less	acre	1	\$12.00	\$12.00
50–100 lb/acre	acre	1	\$13.00	\$13.00
> 100 lb/acre	acre	1	\$15.00	\$15.00
HARVESTING HAY/STRAW				
Swath (sprinkler irrigation)	acre	12	\$11.00–\$16.50	\$13.10
+ \$ /acre (furrow irrigation)	acre	5	\$1.00–\$3.00	\$2.25
Swath	ton	1	\$7.00	\$7.00

Table C. Southcentral Idaho custom rates, 2005-06, *cont.*

Operation	Unit	Responses	Rate	
			Range	Average ¹
HARVESTING HAY/STRAW (continued)				
Rake	acre	7	\$3.00–\$8.00	\$5.35
Rake	ton	2	\$2.00	\$2.00
Bale				
2-string	bale	5	\$0.40–\$0.52	\$0.46
3-string	ton	1	\$18.00	\$18.00
Large rectangular (3x4)	bale	1	\$9.00	\$9.00
Large rectangular (4x4)	bale	12	\$10.00–\$16.00	\$12.60
Large rectangular (4x4) straw	bale	1	\$9.50	\$9.50
Retrieve & stack (short haul or to edge of field)				
2-string	bale	3	\$0.30	\$0.30
2-string	ton	1	\$5.00	\$5.00
3-string	bale	2	\$0.40	\$0.40
3-string	ton	1	\$7.00	\$7.00
Large rectangular (3x4)	bale	7	\$2.75–\$4.00	\$3.20
Large rectangular (4x4)	bale	12	\$3.00–\$10.00	\$4.45
Large rectangular–Straw	bale	1	\$2.50	\$2.50
Combination/package				
Swath & rake	acre	2	\$12.00–\$15.00	\$13.50
Swath, rake & bale (4x4)	ton	8	\$21.00–\$30.00	\$24.65
Swath, rake, bale & stack	ton	4	\$24.00–\$30.00	\$27.15
Rake & bale	ton	5	\$12.00–\$14.00	\$13.10
HARVESTING OTHER FORAGE CROPS				
Corn silage				
Chop, short haul & pit	ton	8	\$7.00–\$8.75	\$7.75
Chop & bag	ton	4	\$12.00–\$14.00	\$12.75
+ \$/ton mile > 1 or 2 miles	ton mile	4	\$0.25	\$0.25
Earlage				
Chop, short haul & pit	ton	1	\$11.50	\$11.50
Chop & bag	ton	1	\$16.50	\$16.50
+ \$/ton mile > 1 mile	ton mile	1	\$0.25	\$0.25
Haylage				
Chop, haul & pit	ton	5	\$7.00–\$8.75	\$7.75
Chop & bag	ton	2	\$12.00–\$12.50	\$12.25
+ \$/ton mile > 1 or 2 miles	ton mile	4	\$0.25	\$0.25
Green Feed				
Chop & haul–up to 7 miles	ton	4	\$7.50–\$8.50	\$7.95
+ \$/ton mile > standard haul	ton mile	1	\$0.25	\$0.25
Chop only: corn, alfalfa, grain	ton	3	\$2.50–\$3.00	\$2.65
Pit packing	ton	1	\$1.50	\$1.50

Operation	Unit	Responses	Rate	
			Range	Average ¹
COMBINE ALFALFA SEED, DRY BEANS, CORN, SMALL GRAINS				
Alfalfa seed	acre	1	\$60.00	\$60.00
Dry beans	acre	3	\$37.00–\$40.00	\$38.35
Dry beans (commercial) *	cwt	4	\$1.35–\$1.65	\$1.50
Dry beans (garden) *	cwt	3	\$1.65–\$1.75	\$1.70
Dry peas: windrow	cwt	2	\$1.35–\$1.65	\$1.50
Dry peas: stump	cwt	1	\$1.75	\$1.75
Grain corn	acre	3	\$28.00–\$33.00	\$31.00
Small grains–irrigated	acre	12	\$25.00–\$33.00	\$28.90
Small grains: minimum irrigated	acre	1	\$23.00	\$23.00
+ Cents per bushel > 100 bu		1	15.0¢	15.0¢
+ Cents per bushel to haulbu		1	30.0¢	30.0¢
Dryland	acre	1	\$12.00	\$12.00
+ Cents per bushel	bu	1	12.0¢	12.0¢
+ Cents per bushel to haulbu		1	12.0¢	12.0¢
Small grains (bushel)	bu	1	\$0.28	\$0.28
Small grains–dryland	acre	2	\$14.00–\$16.00	\$15.00
Combine cleaning	job	1	\$125	\$125
HARVESTING DRY BEANS, PEAS, POTATOES, SUGARBEETS				
Cut/windrow dry beans	acre	8	\$18.00–\$25.00	\$23.40
Cut & thresh garden beans	acre	1	\$36.75	\$36.75
Peas: cut/windrow	acre	2	\$25.00	\$25.00
Potatoes: dig	acre	1	\$135	\$135
Potatoes: dig, haul & place in storage	cwt	1	\$0.60	\$0.60
Sugarbeets: top, lift & short haul	ton	2	\$5.50–\$8.75	\$7.15
HAULING				
Dry beans & dry peas: ≤ 5 miles	cwt	4	\$0.28–\$0.30	\$0.29
Small grains & corn: ≤ 5 miles	cwt	2	\$0.15	\$0.15
≤ 10 miles	cwt	6	\$0.20–\$0.35	\$0.29
Hay: 3x4 bales, 1 mile	ton	3	\$3.00–\$4.00	\$3.50
Hay: 4x4 bales, 1 mile	ton	2	\$3.50–\$4.00	\$3.75
+ \$/ton mile > 1 mile	ton mile	1	\$0.50	\$0.50
Straw: 4x4 bales, 1 mile	bale	1	\$2.50	\$2.50
Silage: < 2 miles	ton	4	\$2.00–\$3.50	\$2.70
+ \$/ton mile > 2 miles	ton mile	3	\$0.15–\$0.25	\$0.18
Sugarbeets: 1 mile	ton	1	\$5.50	\$5.50
+ \$/ton mile > 1 mile	ton mile	1	\$0.10	\$0.10
Manure: 1 mile	load **	5	\$15.00–\$21.00	\$17.20
+ \$/ton mile > 1 mile	ton mile	4	\$1.00–\$2.00	\$1.75

* Minimum charge of \$25 per acre. ** Load = 12-15 tons.

* Minimum charge of \$25 per acre. ** Load = 12-15 tons.

Table D. Eastern Idaho custom rates, 2005-06.

Operation	Unit	Responses	Rate		Operation	Unit	Responses	Rate	
			Range	Average ¹				Range	Average ¹
DRY FERTILIZER APPLICATION					LAND PREPARATION & CULTIVATION				
Ground application					Chop/beat stubble	acre	1	\$8.50	\$8.50
Broadcast: < 500 lb (grain, alfalfa & pasture)	acre	6	\$4.75–\$6.00	\$5.25	Ripping				
Broadcast: > 500 lb (Potatoes & sugarbeets)	acre	5	\$5.50–\$7.00	\$6.00	Depth not specified	acre	4	\$14.00–\$19.00	\$16.40
Broadcast: no rate or crop specified	acre	4	\$4.50–\$5.50	\$5.15	18" disk-ripper	acre	2	\$26.00–\$28.00	\$27.00
Broadcast: all crops by rate					12" disk-ripper	acre	2	\$15.00	\$15.00
0–500 lb/acre	acre	7	\$4.50–\$5.95	\$5.05	Disk-ripper & pack	acre	2	\$38.00–\$40.00	\$39.00
501–750 lb/acre	acre	6	\$5.35–\$5.60	\$5.45	Moldboard plow (stubble)	acre	3	\$16.00–\$27.00	\$21.00
751–1000 lb/acre	acre	7	\$5.85–\$6.75	\$6.15	Moldboard plow (hay/sod)	acre	2	\$35.00–\$45.00	\$40.00
> 1000 lb/acre	acre	4	\$6.50–\$6.85	\$6.65	Chisel plow	acre	7	\$11.50–\$20.00	\$15.20
Variable rate (includes sampling & color photos)	acre	1	\$12.00	\$12.00	Chisel plow: \$/acre + diesel	acre	1	\$15.00	\$15.00
Aerial					Offset disk	acre	7	\$12.00–\$22.00	\$15.60
Up to 100 lb	acre	4	\$6.50–\$7.50	\$7.00	Tandem disk	acre	4	\$8.00–\$16.00	\$11.90
Cents/lb over 100	lb	4	6.5¢–7.5¢	7.0¢	Roller harrow	acre	1	\$10.00	\$10.00
LIQUID FERTILIZER APPLICATION					Cultivate	acre	3	\$8.00–\$12.00	\$10.65
Shank-in	acre	2	\$28.00–\$34.00	\$31.00	MARKOUT, BEDDING & FUMIGATION				
Broadcast	acre	1	\$5.50	\$5.50	Markout: dry	acre	3	\$13.00–\$14.00	\$13.65
Side dress	acre	1	\$5.50	\$5.50	Markout & apply 1 product	acre	8	\$14.00–\$22.00	\$15.80
CHEMICAL APPLICATION					Markout & apply 2 products	acre	3	\$17.50–\$22.00	\$19.00
Ground spray					Markout & apply 3 products	acre	3	\$20.50–\$22.00	\$21.00
No rate or crop specified	acre	6	\$3.00–\$6.50	\$5.15	Markout & apply Telone	acre	3	\$35.00–\$36.00	\$35.65
Up to 10 gallons	acre	2	\$4.75–\$5.50	\$5.15	Markout & apply Vapam	acre	4	\$27.00–\$34.00	\$31.25
11–15 gallons	acre	4	\$5.00–\$7.00	\$6.00	Markout & apply: Telone + Vapam	acre	2	\$42.00	\$42.00
16–20 gallons	acre	3	\$5.50–\$6.50	\$5.85	PLANTING & SEEDING				
All crops	acre	4	\$5.00–\$5.50	\$5.40	Corn	acre	1	\$12.00	\$12.00
Grain & alfalfa	acre	9	\$3.00–\$7.00	\$5.15	Small grains: conventional drill	acre	4	\$12.00–\$13.50	\$12.50
Potatoes & sugarbeets	acre	7	\$5.00–\$7.25	\$5.95	Potatoes	acre	1	\$35.00	\$35.00
Potato desiccant	acre	2	\$7.50–\$8.00	\$7.75	Sugarbeets	acre	2	\$12.00–\$16.00	\$14.00
Sulfuric acid (application only)	acre	6	\$8.00–\$12.00	\$9.05	Air seed: small grains, alfalfa, grass				
w/ acid (20–25 gallons)	acre	2	\$25.00–\$26.50	\$25.75	Seed only	acre	3	\$11.00–\$12.00	\$11.65
Fumigate					Seed & fertilizer	acre	2	\$12.00–\$17.00	\$14.50
Inject Telone	acre	2	\$35.00–\$36.00	\$35.50	Seed & fertilizer: \$/acre + diesel	acre	1	\$11.00	\$11.00
Inject Vapam + Telone (over-under)	acre	2	\$42.00	\$42.00	HARVESTING HAY/STRAW				
Broadcast Vapam	acre	3	\$30.00–\$34.00	\$32.00	Swath (sprinkler irrigation) + \$/acre (furrow irrigation)	acre	15	\$10.00–\$18.00	\$13.90
Aerial spray					Swath \$/acre + fuel	acre	1	\$12.00	\$12.00
3-gallon	acre	4	\$4.50–\$5.50	\$5.00	Swath (min.charge \$8.75/ac)	ton	1	\$7.00	\$7.00
5-gallon	acre	6	\$5.50–\$6.50	\$5.90	Rake	acre	5	\$3.50–\$6.00	\$4.70
7 & 8-gallon	acre	6	\$6.25–\$7.50	\$7.10	Bale				
10-gallon	acre	4	\$7.50–\$8.25	\$8.05	2-string	bale	1	\$0.50	\$0.50
					3-string	ton	1	\$18.00	\$18.00
					Large rectangular (3x4)	bale	6	\$9.50–\$12.00	\$10.75
					Large rectangular (4x4)	bale	13	\$10.00–\$16.00	\$12.75
					Large rectangular (4x4) straw	bale	4	\$8.00–\$15.00	\$10.50

continued next page

Table D. Eastern Idaho custom rates, 2005-06, *cont.*

Operation	Unit	Responses	Rate		Operation	Unit	Responses	Rate	
			Range	Average ¹				Range	Average ¹
HARVESTING HAY/STRAW (continued)					HARVESTING POTATOES & SUGARBEETS				
Retrieve & stack (short haul or to edge of field)					Roll potato vines	acre	1	\$5.00	\$5.00
2-string	bale	1	\$0.30	\$0.30	Beat potato vines	acre	1	\$20.00	\$20.00
3-string	ton	2	\$7.00–\$7.50	\$7.25	Potatoes (dig only)	acre	2	\$135–\$175	\$155
Large rectangular (3x4)	bale	3	\$3.50–\$5.00	\$4.50	Haul potatoes: < 10 miles	load	1	\$60.00	\$60.00
Large rectangular (4x4)	bale	6	\$2.00–\$5.00	\$4.35	Potato cellar equipment	cwt	1	\$0.24	\$0.24
Large rectangular (4x4) straw	bale	3	\$2.00–\$3.00	\$2.35	Sugarbeets (top)	acre	1	\$30.00	\$30.00
Combination/package (4x4)					Sugarbeets (lift)	acre	1	\$50.00	\$50.00
Swath, rake, bale & stack (sprinkler irrigation)	ton	9	\$22.00–\$30.00	\$27.20	Sugarbeets (top & lift)	acre	1	\$100	\$100
Swath, rake, bale & stack (flood irrigation)	ton	1	\$32.00	\$32.00	Haul sugarbeets: base charge	ton	1	\$2.50	\$2.50
Rake & bale	ton	7	\$12.00–\$16.00	\$14.65	+ \$/ton mile	ton mile	1	\$0.10	\$0.10
HARVESTING SILAGE CROPS					HAULING				
Chop only	ton	3	\$3.00–\$5.00	\$4.35	Corn silage: 1 mile (10-wheeler)	ton	3	\$2.75–\$3.00	\$2.85
Chop, short haul & pit	ton	1	\$5.00	\$5.00	+ \$/ton mile > 1 mile	ton mile	1	\$0.35	\$0.35
Packing	ton	2	\$1.50–\$2.25	\$1.90	Corn silage: 1 mile (semi-trailer)	ton	1	\$2.25	\$2.25
Haul 1-mile: 10-wheeler	ton	1	\$2.75	\$2.75	Corn silage	hour	1	\$85.00	\$85.00
Haul 1-mile: semi-trailer	ton	1	\$2.25	\$2.25	Potatoes	load	1	\$60.00	\$60.00
Haul	hour	1	\$85.00	\$85.00	Silage: < 1 mile	ton	3	\$2.75–\$3.00	\$2.85
COMBINE SMALL GRAINS					+ \$/mile over 1 mile	mile	1	\$2.10	\$2.10
Small grains-irrigated	acre	10	\$22.00–\$30.00	\$26.10	Manure				
Small grains-dryland	acre	3	\$16.00–\$18.00	\$17.35	Haul & spread: 1 mile	load ²	3	\$24.00–\$30.00	\$27.00
Small grains-dryland	hr	1	\$100	\$100	+ \$/mile over 1 mile	mile	3	\$1.00–\$3.00	\$2.15
Grain corn	acre	1	\$20 + fuel	\$20 + fuel	¹ Averages are generally rounded to the nearest \$0.05.				
Small grains-minimum	acre	1	\$12.00	\$12.00	² Load = 12–15 tons.				
+ cents per bushel	bu	1	12.0¢	12.0¢					
+ cents per bushel to haul	bu	1	12.0¢	12.0¢					

¹ Averages are generally rounded to the nearest \$0.05.

² Load = 12–15 tons.



**University of Idaho
Extension**

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